

maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle; and
reducing the braking force for at least one condition.

REMARKS

I. Introduction

With the addition of new claims 14 to 17 and the cancellation of claims 5 to 10, 12 and 13 without prejudice, claims 1 to 4, 11 and 14 to 17 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

Applicant notes with appreciation the acknowledgment of the claim for foreign priority and the indication that all certified copies of the priority documents have been received.

Applicant thanks the Examiner for considering the previously filed Information Disclosure Statement, PTO-1449 paper and cited references.

II. Objection to Claim 2

Claim 2 was objected to under 37 C.F.R. § 1.75(c) as being allegedly of improper dependent form. While Applicant respectfully disagrees with the merits of this objection, to facilitate matters, claim 2 has been amended herein without prejudice to delete the phrase "and the brake pedal is depressed." It is therefore respectfully submitted that the present objection has been obviated, and withdrawal of this rejection is therefore respectfully requested.

III. Rejections of Claims 3 and 4 Under 35 U.S.C. § 112

Claim 3 was rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite. While Applicant respectfully disagrees with the merits of this rejection, to facilitate matters, claim 3 has been amended herein without prejudice to change "a driver wishes to make a standing start" to "a driver acts to make a standing start—". Support for this amendment may be found, for example, on page 11, lines 24 to 29 of the Specification. It is therefore respectfully submitted that the

rejection of claim 3 under 35 U.S.C. § 112 has been obviated and withdrawal of this rejection is therefore respectfully requested.

Claim 4 was rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite. Applicant traverses this rejection and respectfully asserts that claim 4 is not indefinite. Specifically, the recitation of "reducing the braking force if the brake pedal is released" in claim 4 does not conflict with the recitation of "maintaining a braking force . . . independently of a extent of a brake pedal actuation" in claim 1. For example, claim 1 also recites "in at least one operating state with the brake pedal depressed." Thus, claim 1 clearly describes the maintaining of a brake force in an operating state with the brake pedal depressed, where claim 4 describes reduction of the braking force if the brake pedal is released. For at least the above reason, it is respectfully submitted that claim 4 fully complies with the requirements of 35 U.S.C. § 112, second paragraph, which merely requires that the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and precision, M.P.E.P. § 2173.02. In view of the foregoing, withdrawal of this rejection is respectfully requested.

IV. Rejection of Claims 1 to 4 and 11 Under 35 U.S.C. § 102(b)

Claims 1 to 4 and 11 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,717,207 ("Kubota et al."). Applicant respectfully submits that Kubota et al. do not anticipate the present claims as amended herein for the following reasons.

Claim 1 relates to a method for controlling a wheel brake of a vehicle. Claim 1 recites that the method includes determining a road slope, and claim 1 has been amended herein without prejudice to recite that the method includes determining whether a brake pedal is depressed and whether a parking brake is engaged. Support for this limitation may be found, for example, on page 10, lines 10 to 23 of the Specification and in Figure 3. Claim 1 further recites that the method includes maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle, and reducing the braking force for at least one condition.

Claim 11 relates to a storage medium for storing at least one computer program, wherein the at least one stored computer program is operable for executing in a computing unit a method for controlling a wheel brake of a vehicle. Claim 11 recites that the method includes determining a road slope, determining whether a brake pedal is depressed and whether a parking brake is engaged, maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle, and reducing the braking force for at least one condition.

Kubota et al. purport to relate to a booster unit for moving a vehicle on a slope and a method of controlling the same. Kubota et al. state that an energization signal is produced if it is determined that a vehicle is in a stopped condition on a slope. Col. 6, lines 60 to 64. However, in determining that the vehicle is in a stopped condition on a slope is not determined with reference to a brake pedal being depressed. In this regard, whether vehicle speed is zero is determined in step 101 based on a vehicle sensor 201. Furthermore, while Kubota et al. state that a third embodiment includes a parking brake sensor 207 and that a determination is made if the parking brake is operated or not, Kubota et al. do not disclose, or even suggest, "determining whether a brake pedal is depressed and whether a parking brake is engaged" as recited in amended claim 1 and amended claim 11.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). As more fully set forth above, it is respectfully submitted that Kubota et al. do not disclose, or even suggest, "determining whether a brake pedal is depressed and whether a parking brake is engaged" as recited in amended claim 1 and amended claim 11. Consequently, it is respectfully submitted that Kubota et al. do not disclose, or even suggest, "maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state

with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle" as recited in amended claim 1 and amended claim 11. It is therefore respectfully submitted that Kubota et al. do not anticipate amended claim 1 and amended claim 11.

Additionally, to reject a claim under 35 U.S.C. § 102, the Examiner must demonstrate that each and every claim limitation is contained in a single prior art reference. See, Scripps Clinic & Research Foundation v. Genentech, Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). Still further, not only must each of the claim limitations be identically disclosed, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the inventions of the rejected claims, as discussed above. See, Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986). In particular, it is respectfully submitted that, at least for the reasons discussed above, the references relied upon would not enable a person having ordinary skill in the art to practice the inventions of the rejected claims, as discussed above. Also, to the extent that the Examiner is relying on the doctrine of inherency, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flows from the teachings of the applied art." See M.P.E.P. § 2112; emphasis in original; and see, Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic. Accordingly, the anticipation rejection as to the rejected claims must necessarily fail for the foregoing reasons.

In summary, it is respectfully submitted that Kubota et al. do not anticipate amended claim 1 or amended claim 11.

As for claims 2 to 4, which ultimately depend from claim 1 and therefore include all of the limitation of claim 1, it is respectfully submitted that Kubota et al. do not anticipate these dependent claims for at least the same reasons given above in support of the patentability of claim 1.

V. New Claims 14 to 17

New claims 14 to 17 have been added herein. It is respectfully submitted that new claims 14 to 17 do not add any new matter and are fully

supported by the present application, including the Specification. It is respectfully submitted that these claims are allowable.

As regards claim 14, it is respectfully submitted that claim 14 is allowable over Kubota et al. for at least the reason that Kubota et al. do not disclose, or even suggest, "determining whether at least one of a brake pedal is depressed and a parking brake is engaged" as recited in claim 14.

As regards claim 15, it is respectfully submitted that claim 15 is allowable over Kubota et al. for at least the reason that Kubota et al. do not disclose, or even suggest, "determining whether a brake pedal is depressed [and] determining whether a parking brake is engaged if it is determined that the brake pedal is not depressed" as recited in claim 15.

As regards claim 16, it is respectfully submitted that claim 16 is allowable over Kubota et al. for at least the reason that Kubota et al. do not disclose, or even suggest, "determining whether at least one of a brake pedal is depressed and a parking brake is engaged" as recited in claim 16.

As regards claim 17, it is respectfully submitted that claim 17 is allowable over Kubota et al. for at least the reason that Kubota et al. do not disclose, or even suggest, "determining whether a brake pedal is depressed [and] determining whether a parking brake is engaged if it is determined that the brake pedal is not depressed" as recited in claim 17.

VI. Conclusion

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment. The attached pages are captioned **"Version with Markings to Show Changes Made."**

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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CUSTOMER NO. 26646



26646

PATENT TRADEMARK OFFICE

Application Serial No. 09/935,155

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 5 to 10, 12 and 13 have been canceled without prejudice.

New claims 14 to 17 have been added.

Claims 1, 2, 3 and 11 have been amended without prejudice as follows:

1. (Amended) A method for controlling a wheel brake of a vehicle, the method comprising:
determining a road slope;
determining whether a brake pedal is depressed and whether a parking brake is engaged;

maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle; and
reducing the braking force for at least one condition.

2. (Amended) The method of claim 1, wherein the braking force is maintained if at least one of the following is satisfied: a drive unit is running; the vehicle is at a complete standstill; and a gear is engaged[; and the brake pedal is depressed].

3. (Amended) The method of claim 1, wherein the braking force is reduced if at least one of the following is recognized: a driver [wishes] acts to make a standing start; a neutral gear is engaged; and the road slope is no longer in a travel direction.

11. (Amended) A storage medium for storing at least one computer program, wherein the at least one stored computer program is operable for executing in a

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

computing unit a method for controlling a wheel brake of a vehicle, the method comprising:

determining a road slope;

determining whether a brake pedal is depressed and whether a parking brake is engaged;

maintaining a braking force at a wheel independently of an extent of a brake pedal actuation, in at least one operating state with one of the brake pedal depressed and the parking brake engaged, if the road slope points in a direction of a future travel direction of the vehicle; and

reducing the braking force for at least one condition.